



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
HOUSTON BRANCH  
10625 FALLSTONE RD.  
HOUSTON, TEXAS 77099

MEMORANDUM

Date: December 11, 2007

Subject: Contract Laboratory Program Data Review

From: *M. Elphick*  
for Marvelyn Humphrey, ESAT Regional PO, 6MD-HC

To: G. Baumgarten, 6SF-RA

Site : JONES ROAD GROUND WATER PLUME

Case#: 36975

SDG# : F2HD1

The EPA Region 6 Houston Branch ESAT data review team has completed a review of the submitted Contract Laboratory Program (CLP) data package for the referenced site. The samples analyzed and reviewed are detailed in the attached Regional data review report.

The data package is acceptable for regional use. Problems, if any, are listed in the report narrative.

If you have any questions regarding the data review report, please call me at (281) 983-2140.



# **ENVIRONMENTAL SERVICES ASSISTANCE TEAM**

ESAT Region 6  
10625 Fallstone Road  
Houston, TX 77099

**Alion Science and Technology**

## **MEMORANDUM**

DATE: December 10, 2007

TO: Marvelyn Humphrey, ESAT PO, Region 6 EPA

FROM: Linda Hoffman, Data Reviewer, ESAT *W*

THRU: Dominic G. Jarecki, ESAT Program Manager, ESAT *W*

SUBJECT: CLP Data Review

Contract No.:	EP-W-06-030
TO No.:	002
Task/Sub-Task:	2-11
ESAT Doc. No.:	7002-211-0104
TDF No.:	6-07-222A
ESAT File No.:	0-0209

Attached is the data review summary for Case # 36975

SDG # F2HD1

Site Jones Road Ground Water Plume

## **COMMENTS:**

### I. LEVEL OF DATA REVIEW

Modified CADRE Review was performed for this package.

### II. CONTRACTUAL ASSESSMENT OF THE DATA PACKAGE

The data package was contractually compliant.

### III. TECHNICAL USABILITY ASSESSMENT OF THE DATA PACKAGE

Some results were qualified for technical problems that were not considered significant.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION 6**  
**HOUSTON BRANCH**  
**10625 FALLSTONE ROAD**  
**HOUSTON, TEXAS 77099**  
**ORGANIC REGIONAL DATA ASSESSMENT**

CASE NO.	36975	SITE	Jones Road Ground Water Plume
LABORATORY	SHEALY	NO. OF SAMPLES	20
CONTRACT#	EP-W-05-031	MATRIX	Water
SDG#	F2HD1	REVIEWER (IF NOT ESB)	ESAT
SOW#	SOM01.2	REVIEWER'S NAME	L. Hoffman
SF#	302DD2CNK	COMPLETION DATE	December 10, 2007

SAMPLE NO.	F2GZ1	F2HD3	F2HL1	F2H02	F2H07
	F2GZ2	F2HE2	F2HL2	F2H03	F2H78
	F2HD1	F2HF9	F2H00	F2H04	F2H82
	F2HD2	F2HH8	F2H01	F2H06	F2H86

DATA ASSESSMENT SUMMARY

TVOA

1. HOLDING TIMES	O
2. GC/MS TUNE/INSTR. PERFORM.	O
3. CALIBRATIONS	M
4. BLANKS	M
5. DMC/SURROGATES	O
6. MATRIX SPIKE/DUPLICATE/LCS	O
7. OTHER QC	N/A
8. INTERNAL STANDARDS	O
9. COMPOUND ID/QUANTITATION	O
10. PERFORMANCE/COMPLETENESS	O
11. OVERALL ASSESSMENT	M

O = Data had no problems.

M = Data qualified because of major or minor problems.

Z = Data unacceptable.

NA = Not applicable.

**ACTION ITEMS:**

**AREA OF CONCERN:** One opening CCV did not meet the technical %D calibration criteria for bromoform. Laboratory contamination caused the qualification of one chloroform result.

**NOTABLE PERFORMANCE:** The data package arrived 6 calendar days early for the 14-day turnaround time requirement.

COMMENTS/CLARIFICATIONS  
REGION 6 CLP QA REVIEW

CASE 36975 SDG F2HD1 SITE Jones Road Ground Water Plume LAB SHEALY

**COMMENTS:** This SDG consisted of 20 water samples for TVOA analysis following SOW SOM01.2. The OTR/COC Records designated sample F2HE2 for laboratory QC analyses, sample F2HF9 as a trip blank, and sample F2HH8 as a field blank. Some samples in this SDG were associated with trip blank sample F2HG1 (SDG F2GY6) and field blank sample F2HH9 (SDG F2HE0).

The target compounds of concern with the user's desired detection limits in parentheses are vinyl chloride (2 µg/L), cis/trans-1,2-dichloroethenes (7 µg/L), and tetrachloroethene (5 µg/L). All samples met the user's desired detection limit criteria. Vinyl chloride was detected at a concentration above the user's desired detection limit in sample F2HE2. Tetrachloroethene was detected in samples F2H78 and F2H82 at concentrations above the CRQL but below the user's desired detection limit.

Modified CADRE Review was performed for this package as requested by the Region. For this review option, the CCS and CADRE primarily determine the laboratory contractual compliance and the technical usability of the sample results, respectively. The raw data review is limited to that performed by CADRE on the staged electronic data deliverables (SEDD). The reviewer performs supplemental hardcopy forms checking and applies Region 6 guidelines, where necessary, to account for known limitations of the electronic review process. Therefore, the reviewer's final assessments may deviate from those found in the CADRE report. The CADRE narrative for the SDG is attached to this report as an addendum for additional information.

**DATA ASSESSMENT:** The QC problems affecting data usability are addressed below.

- The reviewer qualified as estimated the bromoform results for the following samples because the associated opening CCV failed technical %D criteria for bromoform: F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2HD1, F2HF9, F2HH8, F2HL1, and F2HL2.
- The effects of the laboratory contamination are summarized below.

All chloromethane and the laboratory "B"-flagged results below the CRQL's should be considered undetected and were flagged "U" at the CRQL's on the DST.

The laboratory "B"-flagged chloroform result above the CRQL for sample F2H02 should be considered undetected, and the concentration should be used as a raised quantitation limit (M).

**ORGANIC QA REVIEW  
CONTINUATION PAGE**

**CASE 36975 SDG F2HD1 SITE Jones Road Ground Water Plume LAB SHEALY**

- The effect of the field contamination is summarized below.

All acetone and toluene field sample results below the CRQL's should be considered undetected and were flagged "U" at the CRQL's on the DST.

**OVERALL ASSESSMENT:** Some results were qualified for samples F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2HD1, F2HF9, F2HH8, F2HL1, and F2HL2 because of problems with calibration and laboratory contamination. ESAT's final data qualifiers in the Data Summary Table (DST) indicate the technical usability of all reported sample results. An Evidence Audit was conducted for the Complete Sample Delivery Group File (CSF), and the audit results were reported on the Evidence Inventory Checklist.

## ORGANIC ACRONYMS

%D	Percent Difference
%RSD	Percent Relative Standard Deviation
ARO	Aroclors
BFB	4-Bromofluorobenzene
BNA	Base/Neutral and Acid
CADRE	Computer-Aided Data Review and Evaluation
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenylphosphine
DMC	Deuterated Monitoring Compound
DST	Data Summary Table
GC/ECD	Gas Chromatograph/Electron Capture Detector
GC/MS	Gas Chromatograph/Mass Spectrometer
GPC	Gel Permeation Chromatography
IC	Initial Calibration
INDA(B,C)	Individual Standard Mixture A(or B or C)
IS	Internal Standard
LCS	Laboratory Control Sample
LMVOA	Low/Medium Volatile Organic Analysis
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NFG	National Functional Guidelines
OTR/COC	Organic Traffic Report/Chain of Custody
PAH	Polynuclear Aromatic Hydrocarbon
PE	Performance Evaluation
PEM	Performance Evaluation Mixture
PEST	Pesticides
QA	Quality Assurance
QC	Quality Control
QL	Quantitation Limit
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RRT	Relative Retention Time
RSCC	Regional Sample Control Center
RT	Retention Time
SDG	Sample Delivery Group
SDMC	Semivolatile Deuterated Monitoring Compound
SIM	Selected Ion Monitoring
SMO	Sample Management Office
SOW	Statement of Work
SQL	Sample Quantitation Limit
SVOA	Semivolatile Organic Analysis
TCL	Target Compound List
TCX	Tetrachloro-m-xylene
TIC	Tentatively Identified Compound
TVOA	Trace Volatile Organic Analysis
VDMC	Volatile Deuterated Monitoring Compound
VOA	Volatile Organic Analysis

## **HEADER DEFINITIONS FOR ORGANIC EXCEL DST**

CASE: Case Number  
SDG: SDG Number  
EPASAMP: EPA Sample Number  
LABID: Laboratory File/Sample ID  
MATRIX: Sample Matrix  
ANDATE: Sample Analysis Date  
ANTIME: Sample Analysis Time  
CASNUM: Compound CAS Number  
ANALYTE: Compound Name  
CONC: Compound Concentration  
VALDQAL: Region 6 Organic Data Validation Qualifier (see Organic Data Qualifier Definitions on the next page)  
UNITS: Concentration Units  
ADJCRQL: Adjusted Contract Required Quantitation Limit Value  
SMPDATE: Sampling Date  
STATLOC: Station Location

**Disclaimer:** ESAT verified the accuracy of the information reported in the Excel DST only for the following data fields: CASE, SDG, EPASAMP, MATRIX, ANALYTE, CONC, UNITS, VALDQAL, and ADJCRQL. The data qualifiers in the VALDQAL column indicate the technical usability of the reported results.

### **ORGANIC DATA QUALIFIER DEFINITIONS**

The following definitions provide brief explanations of the ESAT-Region 6 qualifiers assigned to results in the Data Summary Table.

- U** Not detected at reported quantitation limit.
- N** Identification is tentative.
- J** Estimated value.
- L** Reported concentration is below the CRQL.
- M** Reported concentration should be used as a raised quantitation limit because of interferences and/or laboratory contamination.
- R** Unusable.
- A** High biased. Actual concentration may be lower than the concentration reported.
- V** Low biased. Actual concentration may be higher than the concentration reported.
- F+** A false positive exists.
- F-** A false negative exists.
- UJ** Estimated quantitation limit.
- T** Identification is questionable because of absence of other commonly coexisting pesticides.
- C** Identification of pesticide or aroclor has been confirmed by Gas Chromatography/Mass Spectrometer (GC/MS).
- X** Identification of pesticide or aroclor could not be confirmed by GC/MS when attempted.
- \*** Result not recommended for use because of associated QA/QC performance inferior to that from other analysis.





































36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	71-55-6	1,1,1-Trichloroethane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	110-82-7	Cyclohexane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	56-23-5	Carbon tetrachloride	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	71-43-2	Benzene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	107-06-2	1,2-Dichloroethane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	79-01-6	Trichloroethene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	108-87-2	Methylcyclohexane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	78-87-5	1,2-Dichloropropane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	75-27-4	Bromodichloromethane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	10061-01-5	cis-1,3-Dichloropropene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	108-10-1	4-Methyl-2-pentanone	5.0	U	ug/L	5.0	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	108-88-3	Toluene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	10061-02-6	trans-1,3-Dichloropropene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	79-00-5	1,1,2-Trichloroethane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	127-18-4	Tetrachloroethene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	591-78-6	2-Hexanone	5.0	U	ug/L	5.0	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	124-48-1	Dibromochloromethane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	106-93-4	1,2-Dibromoethane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	108-90-7	Chlorobenzene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	100-41-4	Ethylbenzene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	95-47-6	o-Xylene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	179601-23-1	m,p-Xylene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	100-42-5	Styrene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	75-25-2	Bromoform	0.50	UJ	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	98-82-8	Isopropylbenzene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	79-34-5	1,1,2-Tetrachloroethane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	541-73-1	1,3-Dichlorobenzene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	106-46-7	1,4-Dichlorobenzene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	95-50-1	1,2-Dichlorobenzene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	96-12-8	1,2-Dibromo-3-chloropropane	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	120-82-1	1,2,4-Trichlorobenzene	0.50	U	ug/L	0.50	11/09/2007	ES11610A
36975 F2HD1 F2HL2	IK10005-012	W	11/11/2007 01:15:00	87-61-6	1,2,3-Trichlorobenzene	0.50	U	ug/L	0.50	11/09/2007	ES11610A

## INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 36975 SDG No. F2HD1 SDG Nos. To Follow Mod. Ref No. Date Rec 11/21/07

EPA Lab ID: <u>SHEALY</u>		<b>ORIGINALS</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Lab Location: <u>Cayce, SC</u>		<b>CUSTODY SEALS</b>			
Region: <u>6</u>	Audit No.: <u>36975/F2HD1</u>	1. Present on package?	X		
ReSubmitted CSF? Yes	No <input checked="" type="checkbox"/>	2. Intact upon receipt?	X		
Box No(s): <u>1</u>		<b>FORM DC-2</b>			
COMMENTS:		3. Numbering scheme accurate?	X		
Item	Description	4. Are enclosed documents listed?	X		
18/18a. All pages, except shipping receiving documents and Forms-DC-1 and 2, appeared to be photocopies. In a laboratory resubmission for another SDG with the same issue, the laboratory stated that the pages were printed from a PDF file that contained scanned data and therefore not original. With the Region's approval, the laboratory was allowed to retain the original pages.		5. Are listed documents enclosed?	X		
		<b>FORM DC-1</b>			
		6. Present?	X		
		7. Complete?	X		
		8. Accurate?	X		
		<b>TRAFFIC REPORT /CHAIN-OF-CUSTODY RECORD(s)</b>			
		9. Signed?	X		
		10. Dated?	X		
		<b>AIRBILLS/AIRBILL STICKER</b>			
		11. Present?	X		
		12. Signed?	X		
		13. Dated?	X		
		<b>SAMPLE TAGS</b>			
		14. Does DC-1 list tags as being included?	X		
		15. Present?	X		
		<b>OTHER DOCUMENTS</b>			
		16. Complete?	X		
		17. Legible?	X		
		18. Original?		X	
		18a. If "NO", does the copy indicate where original documents are located?		X	

Over for additional comments.

Audited by:

Linda Hoffman / ESAT Data Reviewer

Date 12/07/07

Audited by:

Printed Name/Title

Date \_\_\_\_\_

Signature

DC-2

**USEPA Contract Laboratory Program**  
**Organic Traffic Report & Chain of Custody Record**

F2HDI

Case No: 36975  
DAS No:

R

Region: 6	Date Shipped: 11/12/2007	Chain of Custody Record	
Project Code: 129389	Carrier Name: UPS	Sampler Signature:	
Account Code:	Airbill: 1Z66V0692210005423	Relinquished By	(Date / Time)
CERCLIS ID:	Shipped to: Shealy Environmental 106 Vantage Point Drive West Columbia SC 29172 (803) 791-9700	Received By	(Date / Time)
Spill ID:		1	11/12/07 1730
Site Name/State: JONES RD GW PLUME Nov 2007/TX		2	
Project Leader: Jennifer Dart		3	
Action:		4	
Sampling Co: Shaw Environmental, Inc.			

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
F2GZ1	Ground Water/ Andrew Gilchrist	L/G	Trace VOA (14)	6385387 (HCL), 6385388 (HCL), 6385389 (HCL) (3)	OV11603	S: 11/12/2007 14:50		--
F2GZ2	Ground Water/ Andrew Gilchrist	L/G	Trace VOA (14)	6385381 (HCL), 6385382 (HCL), 6385383 (HCL) (3)	OV11610	S: 11/12/2007 14:00		--
F2H8	Ground Water/ Jeffery Smith	L/G	Trace VOA (14)	6385337 (HCL), 6385338 (HCL), 6385339 (HCL) (3)	TO11023	S: 11/12/2007 13:55		--
F2H82	Ground Water/ Jeffery Smith	L/G	Trace VOA (14)	6385672 (HCL), 6385673 (HCL), 6385674 (HCL) (3)	TO11033	S: 11/12/2007 14:40		--
F2H86	Ground Water/ Jeffery Smith	L/G	Trace VOA (14)	6385675 (HCL), 6385676 (HCL), 6385677 (HCL) (3)	TO11202	S: 11/12/2007 15:35		--
F2HD2	Ground Water/ Randy Clouse	L/G	Trace VOA (14)	6385760 (HCL), 6385761 (HCL), 6385762 (HCL) (3)	WE10711	S: 11/12/2007 13:32		--
F2HD3	Ground Water/ Randy Clouse	L/G	Trace VOA (14)	6385763 (HCL), 6385764 (HCL), 6385765 (HCL) (3)	WE10715	S: 11/12/2007 14:27		--
F2HD4	Ground Water/ Randy Clouse	L/G	Trace VOA (14)	6366813 (HCL), 6366814 (HCL), 6366900 (HCL) (3)	WE10719	S: 11/12/2007 15:18		--
F2HE2	Ground Water/ Jennifer Dart	L/G	Trace VOA (14)	6366479 (HCL), 6366480 (HCL), 6366481 (HCL), 6366482 (HCL), 6366483 (HCL), 6366484 (HCL) (6)	MW-12	S: 11/12/2007 13:50		--
F2HE3	Ground Water/ Jennifer Dart	L/G	Trace VOA (14)	6366485 (HCL), 6366486 (HCL), 6366487 (HCL) (3)	MW-13	S: 11/12/2007 15:35		--

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:  F2HE2	Additional Sampler Signature(s): <i>gabrik wj</i> <i>Heather Bauer RWC</i>	Chain of Custody Seal Number: <i>97</i>
Analysis Key: Trace VOA = Trace VOA	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?

TR Number: 6-043013577-111207-0014

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4600

F2V5.1.047 Page 1 of 2



**USEPA Contract Laboratory Program  
Organic Traffic Report & Chain of Custody Record**

Case No: 36975

DAS No:

R

Region: 6	Date Shipped: 11/9/2007	Carrier Name: UPS	Chain of Custody Record	Sampler Signature:
Project Code: 129389	Airbill: 1Z66V0692210005441	Shipped to: Shealy Environmental 106 Vantage Point Drive Cayce SC 29033 (803) 791-9700	Relinquished By (Date / Time)	Received By (Date / Time)
CERCLIS ID:			1 11/9/07 1500	
Spill ID:			2	
Site Name/State: JONES RD GW PLUME Nov 2007/TX			3	
Project Leader: Jennifer Dart			4	
Action:				
Sampling Co: Shaw Environmental, Inc.				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
F2H02	Ground Water/ Randy Clouse	L/G	Trace VOA (14)	6385748 (HCL), 6385749 (HCL), 6385750 (HCL) (3)	PH11618	S: 11/9/2007 9:35		-
F2H03	Ground Water/ Randy Clouse	L/G	Trace VOA (14)	6366885 (HCL), 6366886 (HCL), 6366887 (HCL) (3)	PH11619	S: 11/9/2007 10:30		-
F2H04	Ground Water/ Randy Clouse	L/G	Trace VOA (14)	6385754 (HCL), 6385755 (HCL), 6385756 (HCL) (3)	PH11626	S: 11/9/2007 11:35		-
F2H06	Ground Water/ Jeffery Smith	L/G	Trace VOA (14)	6385334 (HCL), 6385335 (HCL), 6385336 (HCL) (3)	PH11643	S: 11/9/2007 12:40		-
F2H07	Ground Water/ Jeffery Smith	L/G	Trace VOA (14)	6385331 (HCL), 6385332 (HCL), 6385333 (HCL) (3)	PH11650	S: 11/9/2007 11:55		-
F2HD1	Ground Water/ Dietrich Gaitz	L/G	Trace VOA (14)	6366613 (HCL), 6366614 (HCL), 6366615 (HCL) (3)	WE10710	S: 11/9/2007 11:10		--
F2HF9	Ground Water/ Valeri Magnini	L/G	Trace VOA (14)	6356141 (HCL), 6356142 (HCL), 6356143 (HCL) (3)	TRIP BLANK 9	S: 11/9/2007 7:35		Trip Blank
F2HH8	Ground Water/ Jennifer Dart	L/G	Trace VOA (14)	6366464 (HCL), 6366465 (HCL), 6366466 (HCL) (3)	FIELD BLANK 10	S: 11/9/2007 8:25		Field Blank
F2HL1	Ground Water/ Randy Clouse	L/G	Trace VOA (14)	6385798 (HCL), 6385799 (HCL), 6385800 (HCL) (3)	PH11611A	S: 11/9/2007 8:25		Field Duplicate
F2HL2	Ground Water/ Dietrich Gaitz	L/G	Trace VOA (14)	6366604 (HCL), 6366605 (HCL), 6366606 (HCL) (3)	ES11610A	S: 11/9/2007 8:20		Field Duplicate

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>RVW AD Valeri Magnini</i>	Chain of Custody Seal Number: A9
Analysis Key: Trace VOA = Trace VOA	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 6-043013577-110907-0012

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4600

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**USEPA Contract Laboratory Program  
Organic Traffic Report & Chain of Custody Record**

Case No: 36975

DAS No:

R

Region: 6	Date Shipped: 11/9/2007	Chain of Custody Record	
Project Code: 129389	Carrier Name: UPS	Sampler Signature:	
Account Code:	Airbill: 1Z66V0692210005441	Relinquished By	(Date / Time)
CERCLIS ID:	Shipped to: Shealy Environmental 106 Vantage Point Drive Cayce SC 29033 (803) 791-9700	Received By	(Date / Time)
Spill ID:		1	11/9/07 1500
Site Name/State: JONES RD GW PLUME Nov 2007/TX		2	
Project Leader: Jennifer Dart		3	
Action: Sampling Co: Shaw Environmental, Inc.		4	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No/ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	QC Type
F2GP6	Ground Water/ Dietrich Galtz	L/G	Trace VOA (14)	6366601 (HCL), 6366602 (HCL), 6366603 (HCL) (3)	ES11610	S: 11/9/2007 8:20		-
F2GP9	Ground Water/ Dietrich Galtz	L/G	Trace VOA (14)	6366607 (HCL), 6366608 (HCL), 6366609 (HCL) (3)	ES11630	S: 11/9/2007 8:35		-
F2GT9	Ground Water/ Andrew Gilchrist	L/G	Trace VOA (14)	6385241 (HCL), 6385242 (HCL), 6385243 (HCL) (3)	JR11043	S: 11/9/2007 8:05		-
F2GW0	Ground Water/ Andrew Gilchrist	L/G	Trace VOA (14)	6385247 (HCL), 6385248 (HCL), 6385249 (HCL) (3)	JR11414	S: 11/9/2007 8:45		-
F2GW3	Ground Water/ Andrew Gilchrist	L/G	Trace VOA (14)	6385351 (HCL), 6385352 (HCL), 6385353 (HCL) (3)	JR11503	S: 11/9/2007 9:25		-
F2GX1	Ground Water/ Andrew Gilchrist	L/G	Trace VOA (14)	6385354 (HCL), 6385355 (HCL), 6385356 (HCL) (3)	JR11600	S: 11/9/2007 10:05		-
F2GX4	Ground Water/ Andrew Gilchrist	L/G	Trace VOA (14)	6385357 (HCL), 6385358 (HCL), 6385359 (HCL) (3)	JR11620	S: 11/9/2007 10:45		-
F2GX5	Ground Water/ Andrew Gilchrist	L/G	Trace VOA (14)	6385360 (HCL), 6385361 (HCL), 6385362 (HCL) (3)	JR11642	S: 11/9/2007 11:25		-
F2H00	Ground Water/ Dietrich Galtz	L/G	Trace VOA (14)	6366610 (HCL), 6366611 (HCL), 6366612 (HCL) (3)	PH11610	S: 11/9/2007 10:15		-
F2H01	Ground Water/ Randy Clouse	L/G	Trace VOA (14)	6385751 (HCL), 6385752 (HCL), 6385753 (HCL) (3)	PH11611	S: 11/9/2007 8:25		-

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): <i>Valencia</i> <i>as flat</i>	Chain of Custody Seal Number:
Analysis Key: Trace VOA = Trace VOA	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?

**TR Number: 6-043013577-110907-0012**

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, Attn: Heather Bauer, CSC, 15000 Conference Center Dr., Chantilly, VA 20151-3819; Phone 703/818-4200; Fax 703/818-4202

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# **ADDENDUM**

# **CADRE NARRATIVE**

## National Functional Guidelines Report # 3

12:09 Wed, Nov 21, 2007

Lab SHEALY (Shealy Environmental...)

SDG F2HD1

Case 36975

Contract EPW05031

Region 6

DDTID 52430

SOW SOM01.2

**Data Review Results**

Blanks

Blanks	<b>VOA_TRACE</b>
VTLB11	The following trace volatile samples have common contaminant analyte concentrations reported less than 2x the CRQL. The associated method blank has common contaminant analyte concentration is less than 2x the concentration criteria. Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.  F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2  <b>Acetone</b> F2GZ2, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HE2MSD  <b>Methylene chloride</b> F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2
Blanks	<b>VOA_TRACE</b>
VTLB12	The following trace volatile samples have analyte concentrations reported below the CRQL. The associated method blank concentration is less than the concentration criteria. Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.  F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2  <b>4-Methyl-2-pentanone</b> F2HE2, F2HE2MS, F2HE2MSD  <b>Chloroform</b> F2GZ1, F2GZ2, F2H00, F2H01, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2  <b>1,1-Dichloroethene</b> F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2
Blanks	<b>VOA_TRACE</b>
VTLB40	The following trace volatile samples have analyte concentrations reported greater than CRQL and less than 2X the CRQL. The associated method blank concentration is less than the concentration criteria. Detected and nondetected compounds are not qualified. Professional judgement is recommended for qualification of the data. Detected and nondetected compounds are not qualified. Professional judgement is recommended for qualification of the data.  <b>Chloroform</b> F2H02
Blanks	<b>VOA_TRACE</b>
VTLB400	The following trace volatile samples have analyte concentrations reported greater than 2X the CRQL. The associated method blank concentration is less than the concentration criteria. Detected and nondetected compounds are not qualified. Detected and nondetected compounds are not qualified.  <b>1,1-Dichloroethene</b> F2HE2MS, F2HE2MSD
Blanks	<b>VOA_TRACE</b>
VTLB44	The following trace volatile samples have common contaminant analyte concentrations reported less than 2x the CRQL. The associated storage blank has common contaminant analyte concentration is less than 2x the concentration criteria. Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.

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Lab SHEALY (Shealy Environmental...) SDG F2HD1 Case 36975 Contract EPW05031 Region 6 DDTID 52430 SOW SOM01.2

**Data Review Results**

Blanks

	F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2
	<b>Acetone</b> F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H07, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HE2MSD, F2HH8, F2HL1
	<b>Methylene chloride</b> F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HF9, F2HH8, F2HL1, F2HL2
<b>Blanks</b>	<b>VOA TRACE</b>
VTLB45	The following trace volatile samples have analyte concentrations reported below the CRQL. The associated storage blank concentration is less than the concentration criteria. Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrations have been elevated to the CRQL.
	F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2
	<b>Chloroform</b> F2GZ1, F2GZ2, F2H00, F2H01, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2
	<b>Chloromethane</b> F2GZ1, F2GZ2, F2HE2, F2HF9, F2HH8
	<b>1,1-Dichloroethene</b> F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HF9, F2HH8, F2HL1, F2HL2
<b>Blanks</b>	<b>VOA TRACE</b>
VTLB580	The following trace volatile samples have analyte concentrations reported greater than 2X the CRQL. The associated storage blank concentration is less than the concentration criteria. Detected and nondetected compounds are not qualified. Detected and nondetected compounds are not qualified.
	<b>1,1-Dichloroethene</b> F2HE2MS, F2HE2MSD
<b>Blanks</b>	<b>VOA TRACE</b>
VTLB581	The following trace volatile samples have analyte concentrations reported greater than CRQL and less than 2X the CRQL. The associated storage blank concentration is less than the concentration criteria. Detected and nondetected compounds are not qualified. Professional judgement is recommended for qualification of the data. Detected and nondetected compounds are not qualified. Professional judgement is recommended for qualification of the data.
	<b>Chloroform</b> F2H02

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Lab SHEALY (Shealy Environmental...)

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Case 36975

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SOW SOM01.2

**Data Review Results**

Continuing Calibration Verification

Continuing Calibration Verification		VOA_TRACE
VTC8		<p>The following trace volatile samples are associated with an opening or closing CCV percent difference (%D) outside criteria. Detected compounds are qualified J. Nondetected compounds are qualified U.</p> <p>F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2HD1, F2HF9, F2HH8, F2HL1, F2HL2, VBLK8A</p> <p><b>Bromoform VSTD0058A</b></p> <p>F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2HD1, F2HF9, F2HH8, F2HL1, F2HL2, VBLK8A</p>

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***Data Review Results***

DMC/Surrogate

**DMC/Surrogate****VOA\_TRACE**

VTDSS2

The following volatile samples have DMC/SMC recoveries above the upper limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are not qualified.

1,1-Dichloroethene-d2 F2HE2MS, F2HE2MSD

cis-1,2-Dichloroethene, trans-1,2-Dichloroethene

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**Data Review Results**

Detection Limit

Detection Limit	VOA_TRACE
VTDL1	The following volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified J. Nondetected compounds are not qualified.
	F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2, VBLK13, VBLK8A, VBLKB4, VHBLK28
	Ethylbenzene F2HE2, F2HE2MS, F2HE2MSD
	Styrene F2HE2, F2HE2MS, F2HE2MSD
	cis-1,3-Dichloropropene F2HH8
	1,2-Dichloroethane F2HE2, F2HE2MS, F2HE2MSD
	4-Methyl-2-pentanone F2HE2, F2HE2MS, F2HE2MSD, VBLK13, VBLKB4
	Toluene F2HE2, F2HH8
	Tetrachloroethylene F2H07
	cis-1,2-Dichloroethene F2H78, F2H82
	Methyl tert-butyl ether F2H78, F2H82
	m,p-Xylene F2HF9, F2HH8
	Carbon tetrachloride F2H02
	Acetone F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H07, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HE2MSD, F2HH8, F2HL1, VBLK13, VBLKB4, VHBLK28
	Chloroform F2GZ1, F2GZ2, F2H00, F2H01, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2, VBLK13, VBLK8A, VBLKB4, VHBLK28
	Benzene F2HE2
	Chloromethane F2GZ1, F2GZ2, F2HE2, F2HF9, F2HH8, VHBLK28
	Chloroethane F2HE2, F2HE2MS, F2HE2MSD
	Methylene chloride F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2, VBLK13, VBLK8A, VBLKB4, VHBLK28
	Carbon disulfide F2HH8
	1,1-Dichloroethylene F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HF9, F2HH8, F2HL1, F2HL2, VBLK13, VBLK8A, VBLKB4, VHBLK28
	2-Butanone F2HE2MSD
	Trichloroethylene F2H78, F2H82, F2HF9
	Methyl acetate F2HE2MSD

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SOW SOM01.2

***Data Review Results***

Initial Calibration

Initial Calibration	VOA_TRACE
VTC20	The following volatile samples are associated with an initial calibration in which a DMC did not meet relative response factor (RRF) criteria. Detected and nondetected compounds are not qualified. Professional judgement is recommended for qualification of the data.
	F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2, VBLK13, VBLK8A, VBLKB4, VHBLK28
	1,4-Dioxane-d8 VSTD0.508, VSTD0.58X, VSTD00108, VSTD0018X, VSTD00508, VSTD0058X, VSTD01008, VSTD0108X, VSTD02008, VSTD0208X
	F2GZ1, F2GZ2, F2H00, F2H01, F2H02, F2H03, F2H04, F2H06, F2H07, F2H78, F2H82, F2H86, F2HD1, F2HD2, F2HD3, F2HE2, F2HE2MS, F2HE2MSD, F2HF9, F2HH8, F2HL1, F2HL2, VBLK13, VBLK8A, VBLKB4, VHBLK28
	1,4-Dioxane

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SOW SOM01.2

**Data Review Results**

TIC

TIC	VOA_TRACE
VTTIC1	A library search indicates a match at or above 85% for a TIC compound in the trace volatile sample. Detected compounds are qualified NJ. Nondetected compounds are not qualified.
	<b>112-40-3 F2H78</b>
	<b>1120-21-4 F2H78</b>
	<b>195194-80-0 F2H78</b>
	<b>2456-28-2 F2H78</b>
	<b>31295-56-4 F2H78</b>
	<b>6044-71-9 F2H78</b>
	<b>61141-72-8 F2H78</b>
	<b>629-50-5 F2H78</b>
	<b>629-92-5 F2H78</b>
	<b>80655-44-3 F2H78</b>
TIC	VOA_TRACE
VTTIC2	A library search indicates a match below 85% for a TIC compound in the trace volatile sample. Detected compounds are qualified J. Nondetected compounds are not qualified.
	<b>Unknown-01 F2H78</b>
	<b>Unknown-02 F2H78</b>
	<b>Unknown-03 F2H78</b>
	<b>Unknown-04 F2H78</b>
	<b>Unknown-05 F2H78</b>
	<b>Unknown-06 F2H78</b>
	<b>Unknown-07 F2H78</b>
	<b>Unknown-08 F2H78</b>
	<b>Unknown-09 F2H78</b>
	<b>Unknown-10 F2H78</b>
	<b>Unknown-11 F2H78</b>
	<b>Unknown-12 F2H78</b>
	<b>Unknown-13 F2H78</b>
	<b>Unknown-14 F2H78</b>

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*Data Review Results*

TIC

Unknown-15 F2H78

Unknown-16 F2H78